

Table S2 Summary of multivariate pairwise differences between the non-Ethiopian *L. flavopunctatus* members based on linear measurements and geometric craniodental landmarks inferred using permutational multivariate analysis of variance (PerMANOVA). Values represent pairwise PerMANOVAs between clade pairs as post hoc tests with the upper matrix showing the *F* values and the lower matrix showing the Bonferroni-corrected *p* values (statistically significant values are in bold). The test of PerMANOVA showed overall significant skull differences between clades in both the linear dataset (Total sum of squares: 35510; Within-group sum of squares: 29300; *F*: 15.13, *p*: 0.0001) and geometric dataset (Total sum of squares: 0.3591; Within-group sum of squares: 0.3091; *F*: 10.1; *p*: 0.0001).

Linear dataset

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------|-------|-------|
| 1 <i>L. aquilus</i> | | 6.578 | 23.54 | 8.012 | 22.73 | 7.719 | 18.17 | 12.37 | 12.78 | 9.963 | 7.265 |
| 2 <i>L. cf. cinereus</i> | 0.011 | | 39.89 | 3.861 | 9.075 | 11.97 | 24 | 10.86 | 24.99 | 8.876 | 18.88 |
| 3 <i>L. dudui</i> | 0.0055 | 0.0055 | | 39.81 | 13.92 | 52.41 | 10.67 | 32.09 | 13.26 | 12.05 | 12.3 |
| 4 <i>L. kilonzoii</i> | 0.011 | 0.6655 | 0.0055 | | 8.675 | 5.845 | 21.13 | 5.242 | 25.38 | 7.888 | 17.46 |
| 5 <i>L. laticeps</i> | 0.0055 | 0.0055 | 0.011 | 0.0165 | | 17.75 | 12.43 | 17.36 | 2.296 | 6.108 | 3.527 |
| 6 <i>L. machangui</i> | 0.0385 | 0.0055 | 0.0055 | 0.22 | 0.0055 | | 30.86 | 2.927 | 50.26 | 12.75 | 28.73 |
| 7 <i>L. makundii</i> | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | | 21.94 | 6.208 | 7.403 | 2.982 |
| 8 <i>L. sabuni</i> | 0.0055 | 0.0055 | 0.0055 | 0.2255 | 0.0055 | 1 | 0.0055 | | 16.53 | 8.911 | 8.435 |
| 9 <i>L. stanleyi</i> | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 1 | 0.0055 | 0.077 | 0.0055 | | 6.275 | 5.924 |
| 10 <i>L. verhageni</i> | 0.011 | 0.0055 | 0.0055 | 0.0385 | 0.033 | 0.0055 | 0.022 | 0.011 | 0.0715 | | 4.042 |
| 11 <i>L. zena</i> | 0.088 | 0.0055 | 0.0055 | 0.0055 | 1 | 0.0055 | 1 | 0.0275 | 0.0825 | 1 | |

Geometric dataset

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|-------|
| 1 <i>L. aquilus</i> | | 10.18 | 6.423 | 13.64 | 9.309 | 8.911 | 14.16 | 10.31 | 12.31 | 9.511 | 11.68 |
| 2 <i>L. cf. cinereus</i> | 0.0055 | | 4.836 | 13.09 | 1.974 | 15.92 | 14.2 | 10.38 | 7.078 | 10.09 | 12.57 |
| 3 <i>L. dudui</i> | 0.0055 | 0.0055 | | 9.227 | 3.336 | 6.477 | 13.22 | 6.534 | 5.374 | 10.87 | 8.529 |
| 4 <i>L. kilonzoii</i> | 0.0055 | 0.0055 | 0.0055 | | 5.197 | 10.96 | 17.47 | 6.518 | 9.718 | 12.32 | 17.82 |
| 5 <i>L. laticeps</i> | 0.0055 | 0.6105 | 0.011 | 0.0055 | | 5.546 | 9.725 | 6.097 | 2.018 | 8.921 | 3.43 |
| 6 <i>L. machangui</i> | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | | 21.04 | 4.458 | 18.78 | 11.66 | 16.91 |
| 7 <i>L. makundii</i> | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | | 9.826 | 11.6 | 7.296 | 7.805 |
| 8 <i>L. sabuni</i> | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | | 7.394 | 8.679 | 5.877 |
| 9 <i>L. stanleyi</i> | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.627 | 0.0055 | 0.0055 | 0.0055 | | 11.8 | 9.84 |
| 10 <i>L. verhageni</i> | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | | 10.32 |
| 11 <i>L. zena</i> | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.006 | |

Table S3 List of genes amplified showing the respective primers used and PCR reaction settings. F = forward primer, R = reverse primer. The thermal profile for *IRBP* amplification consisted of a touch-down annealing protocol from 52 to 56 °C. Primer references: *CYTB* (Kocher *et al.*, 1989), *COI* (Robins *et al.*, 2007), and *IRBP* (Stanhope *et al.*, 1996).

| Loci | Primer Sequence | <i>De</i> | <i>An</i> | <i>Ex</i> | <i>Cy</i> |
|-------------|---|-----------|-----------|-----------|-----------|
| <i>CYTB</i> | <i>F</i> GGACTTATGACATGAAAAATCATCGTTG | 30s, 95°C | 30s, 59°C | 60s, 72°C | 40 |
| | <i>R</i> GATCCCCATTTCTGGTTTACAAGAC | | | | |
| <i>COI</i> | <i>F</i> CCTACTCRGCCATTTTACCTATG | 30s, 95°C | 30s, 56°C | 30s, 72°C | 35 |
| | <i>R</i> ACTTCTGGGTGTCCAAAGAATCA | | | | |
| <i>IRBP</i> | <i>F</i> ATGGCCAAGGTCCTCTTGGATAACTACTGCTT | 20s, 94°C | 20s, 52°C | 80s, 72°C | 10 |
| | <i>R</i> CGCAGGTCCATGATGAGGTBCTCCGTGTCCTG | 20s, 94°C | 20s, 56°C | 80s, 72°C | 20 |

References

- Kocher, T. D., et al. 1989. Dynamics of mitochondrial DNA evolution in animals: amplification and sequencing with conserved primers. *Proc Natl Acad Sci U S A* 86:6196-6200.
- Robins, J. H., Hingston, M., MATISOO-SMITH, E., & Ross, H. A. 2007. Identifying *Rattus* species using mitochondrial DNA. *Molecular ecology notes* 7:717-729.
- Stanhope, M. J., Smith, M. R., Waddell, V. G., Porter, C. A., Shivji, M. S., & Goodman, M. 1996. Mammalian evolution and the interphotoreceptor retinoid binding protein (IRBP) gene: convincing evidence for several superordinal clades. *J Mol Evol* 43:83-92.